

WORKGROUP #3 – E & I-4 OCCUPANCIES

PROPOSED CODE AMMENDMENTS

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Special Hazards**Laboratories, vocational shops and similar areas—**

Modify Table 302.1 to provide both one-hour occupancy separation and sprinklers in laboratories, vocational shops and other areas of similar hazards not classified as Group H when located in Group E Occupancies—

Table 302.1.1
Incidental use areas

1. ROOM OR AREA -----	SEPARATION -----
Laboratories, and vocational shops, <u>and similar hazardous areas</u> not classified as Group H, located in Group E or I-2 occupancies	1 hour or <u>and</u> provide automatic fire-extinguishing system

- a. Where an automatic fire-extinguishing system is provided, it need only be provided in the incidental use room or area.

Purpose/Rationale:

SECTION 305 EDUCATIONAL GROUP E

305.1 Educational Group E.

Educational Group E occupancy includes, among others, the use of a building or structure, or a portion thereof, by six or more persons at any one time for educational purposes through the 12th grade. Religious educational rooms and religious auditoriums, which are accessory to churches in accordance with Section 302.2 and have occupant loads of less than 100, shall be classified as A-3 occupancies.

305.2 Day care.

The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than five children older than 2½ years of age, shall be classified as a Group E occupancy.

Exception: *A facility where occupants are not capable of responding to an emergency situation without physical assistance from the staff shall be classified as Group I-4.*

Specific purpose and rationale: This amendment clarifies that an E Occupancy classification is meant to be used for children physically or cognitively capable of responding to an emergency situation. The IBC Commentary, Volume 1 indicates that children less than 2 ½ years of age are generally incapable of responding to emergencies and therefore need to be placed in an occupancy with a higher level of protection (Group I-4).

SECTION 308 INSTITUTIONAL GROUP I

308.5 Group I-4, day care facilities.

This group shall include buildings and structures occupied by persons of any age who receive custodial care for less than 24 hours by individuals other than parents or guardians, relatives by blood, marriage or adoption, and in a place other than the home of the person cared for. A facility such as the above with five or fewer persons shall be classified as a Group R-3 or shall comply with the *International Residential Code* in accordance with Section 101.2. Places of worship during religious functions are not included.

308.5.1 Adult care facility.

A facility that provides accommodations for less than 24 hours for more than five unrelated adults and provides supervision and personal care services shall be classified as Group I-4.

Exception: ~~A facility where occupants are capable of responding to an emergency situation without physical assistance from the staff shall be classified as Group A-3.~~

Specific purpose and rationale: Under current California Building Standards Code, licensed adult daycare facilities are generally classified as a Group E, Division 3 Occupancy (E-3). The Group A-3 occupancy classification provides substantially less fire and life safety protection than the CBC E-3 occupancy classification. This includes the requirement for a fire alarm at 50 occupants versus 300 occupants.

308.5.2 Child care facility.

A facility that provides supervision and personal care on less than a 24-hour basis for more than five children 2½ years of age or less shall be classified as Group I-4.

Exception: ~~A child day care facility that provides care for more than five but no more than 100 children 2½ years or less of age, when the rooms where such children are cared for are located on the level of exit discharge and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E.~~

Specific purpose and rationale: The IBC Commentary indicates that children less than 2½ years of age are generally incapable of responding to emergencies and therefore need to be placed in an occupancy with a higher level of protection (Group I-4). Current California Building Standards Code provides a higher level of protection including the requirement for two exits for 7 occupants versus two exits for 50 occupants.

SECTION 410 STAGES AND PLATFORMS

Re: Stages with proscenium openings less than 50 feet—Add to 410.3.4 the following:

410.3.4 Proscenium wall. Where the stage height is greater than 50 feet (15 240 mm), all portions of the stage shall be completely separated from the seating area by a proscenium wall with not less than a 2-hour fire-resistance rating extending continuously from the foundation to the roof.

Where the stage height is 50 feet (15 240 mm) or less, the stage area shall be separated from accessory spaces by a one-hour fire-restive occupancy separation.

Exception: Control rooms and follow spot rooms may be open to the audience.

Purpose/Rationale:

Separation of stage from accessory spaces in CBC Section 405.3.1 is more restrictive than that found in IBC 410.3.4 for stage heights 50 feet or less, therefore language carry-over from CBC to IBC is proposed as noted above.

SECTION 4XX

Establish new section in Chapter 4—Special Detailed Requirements Based on Use and Occupancy for Group E Occupancies and a new sub-section—Location on Property within this Section

4XX.XX Location on Property. All buildings housing Group E Occupancies shall front directly on a public street or an exit discharge not less than 20 feet (6096 mm) in width. The exit discharge to the public street shall be a minimum 20-foot-wide (6096 mm) right-of-way, unobstructed and maintained only as access to the public street. At least one required exit shall be located on the public street or on the exit discharge.

Purpose/Rationale:

A 20-foot wide public street or exit discharge is required for both emergency access and occupant egress. It is proposed to add language from CBC Section 305.3 is proposed to a new sub-section in Chapter 4 (Special Detailed Requirements Based on Use and Occupancy).

The creation of a Section (Group E Occupancies) and sub-section (Location on Property) is consistent with Section 406.3.7—Location on property: motor-vehicle-related occupancies; and 415.3—Location on property: Groups H-1 through H-5.

SECTION 4XX

Re: Access and Means of Egress Facilities and Stage means of egress.

4XX.XX. Access and Means of Egress.

1. Locations of Group E Occupancies on property shall comply with Section 4XX.XX.
2. Access to, and egress from, buildings required to be accessible shall be provided as specified in Chapter 11.
3. Means of egress shall be as provided in Chapter 10. (See Section 1014.X for laboratories, vocational shops and areas of similar hazards and Section 1014.6 for stages).

Purpose/Rationale:

Subsection will provide guidance to special access and egress issues related to E and I-4 Occupancies.

Creation of sub-section is consistent with 406.3.8 Means of egress: Motor-vehicle related occupancies 408.3 Means of egress: Group I-3.

SECTION 903

AUTOMATIC SPRINKLER SYSTEMS

Add new Item 3 to list of areas in Group E Occupancies where automatic fire sprinkler systems are required

[F] 903.2.2 Group E. An automatic sprinkler system shall be provided for Group E occupancies as follows:

4. Throughout all Group E fire areas greater than 20,000 square feet (1858 m²) in area.
5. Throughout every portion of educational buildings below the level of exit discharge.

Exception: An automatic sprinkler system is not required in any fire area or area below the level of exit discharge where every classroom throughout the building has at least one exterior exit door at ground level.

6. In rooms or areas with special hazards such as laboratories, vocational shops and other such areas where hazardous materials in exempt amounts is frequently used.

Purpose/Rationale:

In buildings containing Group E Occupancies the CBC requirements are as follows:

[CBC 305.2.4] All laboratories, vocational shops and similar areas containing hazardous materials are required to be separated from each other and from other portions of the building by not less than a one-hour fire-resistive occupancy separation

[CBC 904.2.4.1] All buildings throughout are required to be sprinklered.

To keep with the same level of protection in the CBC, at least in the areas of special hazards, modifications are proposed in Table 302.1.1—Incidental Use Areas and in [F] 903.2.2 Group E as shown above.

SECTION 1014

EXITS AND EXIT ACCESS DOORWAYS

Provide for a minimum of two exits for laboratories, vocational shops and similar areas having a floor area of 200 square feet or more where special hazards exist. Also limit maximum travel distance to an exit or exit access door to a maximum 75 feet. (CBC 1007.3.8) (Item 11) (Alternate new section in Chapter 4 for Group E and I-4 Occupancies)—

1014.1 Exit or exit access doorways required. Two exits or exit access doorways from any space shall be provided where one of the following conditions exists:

7. The occupant load of the space exceeds the values in Table 1014.1.
8. The common path of egress travel exceeds the limitations of Section 1013.3.
9. Where required by Sections 1014.3, 1014.4, and 1014.5 and 1014.X.

Exception: Group I-2 occupancies shall comply with Section 1013.2.2.

TABLE 1014.1 SPACES WITH ONE MEANS OF EGRESS	
OCCUPANCY	MAXIMUM OCCUPANT LOAD
A, B, E ¹ , F, M, U	50
H-1, H-2, H-3	3
H-4, H-5, I-1, I-3, I-4, R	10
	30

1. For special hazardous areas such as laboratories and vocation shops and similar areas, see Section 1014.X

1014.X Special hazardous areas not classified as H Occupancies in Group E Occupancies. Laboratories, vocational shops and other areas with similar hazards having a floor area of 200 square feet (18.6 m²) or more shall have access to not less than two separate exits or exit-access doorways. All portions of such laboratories shall be within 75 feet (22 860 mm) of an exit or exit access door.

Purpose/Rationale:

Modifications to Sections 1014.1 and Table 1014.1 are proposed to reference new section 1014.X ('X' being number to be selected by Core committee) which provides for a minimum of two exits and a maximum travel distance of 75 feet to an exit or exit access in areas with special hazards that are 200 square feet or more.

This requirement is consistent with CBC Section 1007.3.8.